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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,471	12/19/2001	Raymond Moore	020375-004500US	1898
20350	7590	10/05/2005		
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			EXAMINER ABEL JALIL, NEVEEN	
			ART UNIT	PAPER NUMBER
			2165	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,471

Applicant(s)

MOORE, RAYMOND

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 8, 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,10-16,18,19,22,23,26,27 and 29-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,10-16,18,19,22,23,26,27 and 29-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8-July-2005 has been entered.
2. The amendment filed on 8-July-2005 has been received and entered. Claims 2, 7-9, 17, 20-21, 24-25, and 28 have been cancelled. Therefore, claims 1, 3-6, 10-16, 18-19, 22-23, 26-27, and 29-39 are now pending

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 3-6, 10-15 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, directed towards an data structure.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". "Rubber Tip Pencil Co. V. Howard", 20 Wall.498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work "Gottschalk v. Benson", 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws of nature, physical

phenomena, and abstract ideas are not patentable subject matter "Parker v. Flook", 197 USPQ 193, 201 (S Ct 1978).

Database Structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are neither physical "things" nor statutory processes. Applicant's claims are not within any of the statutory classes. "A database structure" should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-6, 10-16, 18-19, 22-23, 26-27, and 29-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacDonald et al. GIS in Banking: Evaluation of Canadian Banking Mergers. Canadian Journal of Regional Science. Vol. XXIV: 3. Autumn, 2001 in view of CACI's FiledForce Planning services and territory optimization software- "CACI Information Solutions" - Published Summer 2001 in Marketing Solutions Today and "CACI Limited Home Page" -dated June 2001 (hereafter CACI).

As to claim 1, MacDonald et al. discloses a method for characterizing market distribution for a business, the method comprising:

determining a location for each of a plurality of business comprised by the business and situated at different geographical locations to provide sales of the business products (See MacDonald et al. page 1, also see MacDonald et al. page 2);

determining a location for each of a plurality of competitor comprised by one or more competitors and situated at a different geographical locations to provide sales of competitors products, wherein each if the in or more competitors competes for a sales of products with the business (See MacDonald et al. page 12, paragraphs 2-3, wherein “competitors” reads on “other banking branches”);

populating at least one database with the locations for the business and the locations for the competitor (See MacDonald et al. pages 5-6, paragraphs 4-6; also see MacDonald et al. page 12, paragraphs 2-3);

from location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2), calculating a probability that quantifies a level of competition to the business for sales of the business’s products (See MacDonald et al. page 13, paragraph 3, wherein “probability” reads on “percentage of market enumeration”, also see MacDonald et al. page 14, paragraph 3, also see MacDonald et al. page 6, paragraph 6) the competition being provided by the one or more competitors providing sales of the competitors products, and the level of competition being quantified in terms of a distance measure between the business and competitor representatives (See MacDonald et al. page 7, paragraphs 1-3; also see MacDonald et al. page 8, paragraph 2, also see MacDonald et al. page 12, paragraph 1);

correlating the quantified level of competition with demographic data corresponding to the location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2).

MacDonald et al. does not teach the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

CACI teaches the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative (See CACI page 9, and see CACI page 10, and CACI page 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. by the teaching of CACI to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative because it is well known in the database art that a business is made up of representative or representative's input data and which can be quantified.

As to claim 3, MacDonald et al. as modified discloses wherein determining the location for each of the plurality of competitor representatives comprises accessing an representative-locator service on an internet web site for the one or more competitors (See CACI page 11,

figure shows a Web browser front end, also see CACI page 14, and see CACI page 20).

As to claim 4, MacDonald et al. as modified discloses wherein accessing the representative-locator service is performed automatically by a web robot (See CACI page 14).

As to claim 5, MacDonald et al. as modified discloses wherein determining the location for each of the plurality of competitor representatives comprises accessing an authenticated source identifying transactions preformed by the competitor representatives (See MacDonald et al. page 13, paragraph 3, wherein “transactions” reads on “deposits”).

As to claim 6, MacDonald et al. as modified discloses wherein the authenticated source comprises a publicly available government record (See MacDonald et al. page 1, paragraph 2).

As to claim 10, MacDonald et al. discloses wherein the demographic data comprise census data (See MacDonald et al. page 10, paragraph 1).

As to claim 11, MacDonald et al. discloses further comprising applying a filter criterion to the correlated data to characterize geographic divisions within the demographic data by market penetration (See MacDonald et al. page 8, paragraphs 1-2, wherein “divisions” reads on “regions”).

As to claim 12, MacDonald et al. discloses further comprising displaying the locations graphically according to the geographic divisions (See MacDonald et al. page 10, figure shows map), wherein the geographic divisions are distinctly displayed according to the filter criterion (See MacDonald et al. page 10, paragraphs 1-2).

As to claim 13, MacDonald et al. discloses further comprising displaying the locations graphically (See MacDonald et al. page 10, figure 1; also see MacDonald et al. page 11, figure 1).

As to claim 14, MacDonald et al. discloses wherein displaying the locations graphically comprises displaying the locations on a map (See MacDonald et al. page 10, figure 1; also see MacDonald et al. page 11, figure 1).

As to claim 15, MacDonald et al. discloses wherein the at least one database includes product information for the business representatives and for the competitor representatives, the method further comprising displaying the product information for at least one of the locations (See MacDonald et al. page 12, paragraphs 2-3, also see CACI page 10).

As to claim 16, MacDonald et al. discloses a computer-readable storage medium having a computer-readable program embodied therein for directing operation of a computer system including a communications system, a processor, and a storage device, wherein the computer-



readable program includes instructions for operating the computer system to characterize market distribution for a business in accordance with the following:

maintaining at least one database on the storage device to store a location (See ) for each of a plurality of business comprised by the business and situated at different geographical locations to provides sales of the business's products (See MacDonald et al. page 1, also see MacDonald et al. page 2); and

to store a location for each of a plurality of competitor comprised by one or more competitors and situated at different geographical locations to provide sales of the competitors products, wherein each of the one or more competitors competes for sales of products with the business (See MacDonald et al. page 12, paragraphs 2-3, wherein "competitors" reads on "other banking branches");

from location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2), calculating a probability that quantifies a level of competition to the business for sales of the business's products (See MacDonald et al. page 13, paragraph 3, wherein "probability" reads on "percentage of market enumeration", also see MacDonald et al. page 14, paragraph 3, also see MacDonald et al. page 6, paragraph 6), the competition being provided by the one or more competitors providing sales of the competitors products, and the level of competition being quantified in terms of a distance measure between the business and competitor representatives (See MacDonald et al. page 7, paragraphs 1-3; also see MacDonald et al. page 8, paragraph 2, also see MacDonald et al. page 12, paragraph 1);

correlating the quantified level of competition with demographic data corresponding to the location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2).

MacDonald et al. does not teach the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

CACI teaches the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative (See CACI page 9, and see CACI page 10, and CACI page 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. by the teaching of CACI to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative because it is well known in the database art that a business is made up of representative or representative's input data and which can be quantified.

As to claim 18, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for determining the location for each of the plurality of competitor representatives by accessing an representative-locator service with the communications system on an internet web sited for the one or more competitors (See

MacDonald et al. page 12, paragraph 3, also see CACI page 26, also see CACI page 11, figure shows a Web browser front end, also see CACI page 14, and see CACI page 20, also see CACI page 5).

As to claim 19, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for determining the location for each of the plurality of competitor representatives by accessing a publicly available source identifying transactions performed by the competitor representatives (See MacDonald et al. page 13, paragraph 3, wherein “transactions” reads on “deposits”, also see CACI page 5).

As to claim 22, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for operating the processor to apply a filter criterion to the correlated data to characterize geographic divisions within the demographic data by market penetration (See MacDonald et al. page 11, also see 7, paragraphs 4-5).

As to claim 23, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for:

generating a graphical representation of the locations according to the geographic divisions, the graphical representation including a distinction among the geographic divisions according to the filter criterion (See CACI page 9, also see MacDonald et al. page 11, also see 7, paragraphs 4-5); and

transmitting the graphical representation over the communications system (See MacDonald et al. page 6, wherein “information is shared”, also see CACI page 11, figure shows a Web browser front end, also see CACI page 14, and see CACI page 20).

As to claim 26, MacDonald et al. discloses a computer system comprising:  
a communications system (See MacDonald et al. page 9, paragraph 2);  
a storage device (See MacDonald et al. page 9, paragraph 2);  
a processor in communication with the communications system and the storage device  
(See MacDonald et al. page 9, paragraph 2); and

a memory coupled with the processor, the memory comprising a computer-readable storage medium having a computer-readable program embodied therein for operating the computer system to characterize market distribution for a business (See MacDonald et al. page 8, paragraph 2), the computer-readable program including:

instructions for maintaining at least one database on the storage device to store a location (See MacDonald et al. page 9, paragraph 2) for each of a plurality of business comprised by the business and situated at different geographical locations to provides sales of the business’s products (See MacDonald et al. page 1, also see MacDonald et al. page 2), and to store a location for each of a plurality of competitor comprised by one or more competitors and situated at different geographical locations to provide sales of the competitors products, wherein each of the one or more competitors competes for sales of products with the business (See MacDonald et al. page 12, paragraphs 2-3, wherein “competitors” reads on “other banking branches”);

instruction for calculating, from location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2), a probability that quantifies a level of competition to the business for sales of the business's products (See MacDonald et al. page 13, paragraph 3, wherein "probability" reads on "percentage of market enumeration", also see MacDonald et al. page 14, paragraph 3, also see MacDonald et al. page 6, paragraph 6), the competition being provided by the one or more competitors providing sales of the competitors products, and the level of competition being quantified in terms of a distance measure between the business and competitor representatives (See MacDonald et al. page 7, paragraphs 1-3; also see MacDonald et al. page 8, paragraph 2, also see MacDonald et al. page 12, paragraph 1);

instruction for correlating the quantified level of competition with demographic data corresponding to the location information in the at least one populated database (See MacDonald et al. page 9, paragraph 2).

MacDonald et al. does not teach the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

CACI teaches the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative (See CACI page 9, and see CACI page 10, and CACI page 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified MacDonald et al. by the teaching of CACI to include the business is defined as a plurality of business representatives; and the competitor's business defined as competitor's representative because it is well known in the database art that a business is made up of representative or representative's input data and which can be quantified.

As to claim 27, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for determining the location of each of the plurality of competitor representatives by accessing an representative-locator service with the communications system on an internet web site for the one or more competitors (See CACI page 11, figure shows a Web browser front end, also see CACI page 14, and see CACI page 20).

As to claim 29, MacDonald et al. as modified discloses wherein the computer-readable program further includes instructions for operating the processor to apply a filter criterion to the correlated data to characterize geographic divisions within the demographic data by market penetration (See MacDonald et al. page 18, paragraphs 1-2).

As to claim 30, MacDonald et al. as modified discloses wherein the memory further comprises a second computer-readable storage medium having a second computer-readable program embodied therein for operating the computer system to populate the at least one database, the second computer-readable program including:

instructions for accessing a representative-locator service maintained by the one or more competitors at an internet web site (See MacDonald et al. page 13, paragraphs 3-4, also see CACI page 11, figure shows a Web browser front end, also see CACI page 14, and see CACI page 20);

instructions for extracting location information for the plurality of competitor representatives from the representative-locator service (See MacDonald et al. page 1, paragraphs 1-2, also see MacDonald et al. page 12, paragraphs 2-3); and

instructions for storing the location information in the at least one database (See CACI page 9, wherein “database” reads on “knowledge store”).

As to claims 31, 34, and 37, MacDonald et al. as modified discloses wherein calculating the probability that at least one of the competitor representatives exists within a predetermined distance of each business representative (See CACI page 10).

As to claims 32, 35, and 38, MacDonald et al. as modified discloses wherein calculating the probability that quantifies the level of competition comprises calculating a probability that at least one of the business representatives exists within a predetermined distance of each competitor representative (See MacDonald et al. page 1, paragraphs 1-2, also see MacDonald et al. page 12, paragraphs 2-3, also see MacDonald et al. page 5, paragraphs 1-4).

As to claims 33, 36, and 39, MacDonald et al. as modified discloses wherein calculating the probability that quantifies the level of competition comprises calculating a probability that

any of the competitor representatives exists within a predetermined distance of any of the business representatives (See MacDonald et al. page 2, paragraphs 1-2, also see CACI page 12, wherein “probability” reads on “demographic reports” that calculate real value of new store in a territory).

### *Response to Arguments*

7. Applicant's arguments with respect to claims 1, 3-6, 10-16, 18-19, 22-23, 26-27, and 29-39 have been considered but are moot in view of the new ground(s) of rejection.

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fox et al. (U.S. Patent No. 5,491,629) teaches quantify sales according to weather and location.

Tobin et al. (U.S. Pub. No. 2002/0165756 A1) teaches certain geographic coverage for business using business directory.

Harper (U.S. Pub. No. 2003/0023466 A1) teaches production planning.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074.

The examiner can normally be reached on 8:30AM-5:30PM EST.



Art Unit: 2165

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Neveen Abel-Jalil  
October 3, 2005



CHARLES RONES  
PRIMARY EXAMINER